REMARKS

Claim rejections under 35 U.S.C. § 102

The Examiner rejected Claims 1-4, 6-14 and 16-18 under "35 U.S.C. 102(e) as being anticipated by Saied Moezzie, U.S. Patent No. 5,850,352".

Specifically, the Examiner stated that:

> Moezzi discloses a method for viewing a set of sequential bitmaps comprising, sequentially playing the set of sequential bitmaps (col. 7, 11. 17-20), wherein, each sequential bitmap is offset in time (col. 18, 11. 10-15), defining a view window within the overlapping immersive picture which defines a portion of the overlapping immersive picture under the view window (col. 18, 11. 5-15), and allowing the view window to move with respect to the overlapping immersive picture (col. 7, 11. 46-51).

Applicants respectfully submit that the Examiner has misconstrued the teachings of Moezzi et al. Specifically, applicants respectfully submit that Moezzi et al. teaches that "a full three-dimensional model of the scene is created the [sic] from the captured video. From this three-dimensional model a video representation of the scene … is produced or synthesized." (Moezzi et al., col. 10, 11. 21-27). Furthermore Moezzi et al. states that "Scene views are constantly generated by reference to the content of a dynamic three-dimensional model…" (Moezzie et al., col. 18, 11. 5-6).

Claim 1 recites "sequentially playing the set of sequential bitmaps" and "defining a view window within each sequential bitmap which defines a portion of the sequential

bitmap under the view window.." The Examiner cited Moezzi
et al., col. 18, ll. 5-15 as teaching this feature.
However, Moezzie et al., col. 18, ll. 5-15 states:

> <u>Scene views are constantly generated by</u>
> <u>reference to the content of a dynamic three-</u>
> <u>dimensional model</u>-which model is sort of a
> three-dimensional video memory without the
> storage requirement of a one-to -one
> correspondence between voxels (solid pixels)
> and memory storage addresses. Consider
> stereoscopy. It is "no effort at all" for
> an immersive video system to present, as a
> selected stream of video data containing a
> selected view, first scan time video data
> and second scan time video data that is
> displaced, each relative to the other, in
> accordance with the location of each object
> depicted along the line of view.
> (emphasis added) (Moezzie et al., col. 18, ll. 5-
> 15)

Because "the scene views are generated by reference to the
contents of a dynamic three-dimensional model" Applicants
respectfully submit that the views taught by Moezzi et al.
do not teach or suggest "defining a view window within each
sequential bitmap" as recited in Claim 1.

Claim 1 also recites "allowing the view window to move
with respect to the sequential bitmaps as the sequential
bitmaps are sequentially played." The Examiner cites Moezzi
et al., col. 7, ll. 46-51, for teaching this feature.
Moezzie et al., col. 7, ll. 46-51 states:

> The underlying task in video mosaicing is to
> create larger images from frames obtained
> from one or more single cameras, typically
> one single camera producing a panning video
> stream. To generate seamless video mosaics,
> registration and alignment of the frames
> from a sequence are critical issues.

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Applicants fail to see how the cited portion of Moezzie relates to "allowing a view window to move with respect to the sequential bitmaps as the sequential bit maps are played. While, Moezzi et al. does seem to combine multiple images from different cameras into a large mosaic image. The use of the mosaic image in Moezzi is quite different from claim 1. Specifically, Moezzi et al. states that:

> In the immersive video system of the present invention, <u>visual processing algorithms are used to extract information about object motion and activity</u> (both of which are dynamic by definition) in the real world environment. <u>This information--along with (i) the raw video data and (ii) a priori information about the geometry of the environment--is used to construct a coherent and complete visual representation of the environment. This representation can then be used to construct accurate immersive environments based on real world object behavior and events.</u> Again, the rough concept, if not the particulars, is clear. The immersive environment comes to be only through a model, or representation, or the real world environment.(emphasis added) (Moezzi et al., col. 23, ll. 29-41)

Thus, Applicant respectfully submits that Moezzi et al. uses the mosaics to create three-dimensional models, which are then used to generate appropriate views. Thus, Applicants respectfully submit that Moezzi does not teach or suggest "defining a view window within each sequential bitmap" and "allowing the view window to move with respect to the sequential bitmaps." Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 1. Similarly, Applicants respectfully submit that Claims 2-10, which depend from Claim 1 are also allowable.

Accordingly, Applicants respectfully request reconsideration and allowance of Claims 2-10.

Furthermore, Applicants respectfully submit that Claim 8, which recites "wherein each sequential bitmap has a 360 degree field of view and an overlap portion" and Claim 9, which recites "wherein the overlap portion has a 40 degree field of view" and Claim 10, which recites "wherein the view window has a field of view and the overlap portion has a field of view greater than the field of view of the view window." are patentable in their own right. As explained above, Moezzi et al. uses multiple cameras to generate a mosaic. While the cameras may overlap the resulting mosaic which is used to generate 3D models would not have overlapping portions. Thus, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 8-10.

In rejecting Claim 11, the Examiner stated that

> Moezzi disclose a method of viewing an immersive picture comprising defining an immersive picture (Fig. 11), repeating a portion of the content of the immersive picture (Fig. 1A), storing the repeated portion together with the immersive picture to form an overlapping immersive picture (col. 8, ll. 42-50), defining a view window within the overlapping immersive picture which defines a portion of the overlapping immersive picture under the view window (col. 8, ll. 5-15) and allowing the view window to move with respect to the overlapping immersive picture (col. 7, ll. 46-51).

As explained above with respect to Claim 1, Applicants respectfully submit that Moezzie et al. does not teach or suggest using a view window as recited in Claim 11. Furthermore, as explained above, Applicants respectfully

submit that Moezzi et al.'s use of overlapping views is to generate a mosaic, without overlap. Thus, Moezzi et al. teaches away from the limitation of Claim 11. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 11. Similarly, because Claims 12-16 depend from Claim 11, Applicants respectfully request reconsideration and withdrawal of the rejection of Claims 12-16.

Furthermore, Applicant respectfully submits that Claim 13, which recites:

> allowing the view window to define a first portion of the overlapping immersive picture near a first edge of the overlapping immersive picture as the view window moves towards the first edge; and
> causing the view window to define a second portion of the overlapping immersive picture near a second edge of the overlapping immersive picture similar in content to the first portion when the view window reaches a first distance from the first edge.

is patentable in its own right. The Examiner cited Moezzi et al., col. 29 line 50 to col. 30, line 22 and col. 30, ll. 18-35, and 45-47) as teaching the limitations of Claim 13. However the cited portions of Moezzi et al. discuss "Camera Handoff" or "Best View Selection". Moezzi et al. states that "A key element in the maintenance of camera views is the notion of a Camera Hand-off, here understood to be the event [in] which a dynamic object passes from one camera coverage zone to another." (Moezzi et al., col. 29, ll. 53-56). Furthermore, Moezzi et al. states that "the best view concept can be illustrated by considering a case where there are N cameras monitoring the environment." (Moezzi et al., col. 30, ll. 36-37). Thus, the portions of Moezzi et al.

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cited by the Examiner are applicable to selecting between multiple camera views rather than a " allowing the view window to define a first portion of the overlapping immersive picture " and " causing the view window to define a second portion of the overlapping immersive picture near a second edge of the overlapping immersive picture similar in content to the first portion..." as recited in Claim 13. Therefore, Applicants respectfully submit that Claim 13 is allowable over Moezzi et al. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 13.

The Examiner rejected independent Claim 17 using the same rationale as the rejection of Claim 11. For the reasons given above with respect to Claim 11, Applicants respectfully submit that Claim 17 is allowable. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 17. Similarly, because Claim 18 depends from Claim 17, Applicants respectfully request reconsideration and withdrawal of the rejection of Claim 18.

Claim rejections under 35 U.S.C. § 103

The Examiner rejected Claims 5 and 15 under "35 U.S.C. 103(a) as being unpatentable over Moezzie, as applied to claims 1 and 11 above, and further in view of Shenchang Chen, U.S. Patent 6,278,466". For the reasons given above with respect to Claim 1 and 11, Applicants respectfully submit that Claims 1 and 11 are allowable. Thus, Applicants respectfully request reconsideration and withdrawal of the

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rejection of Claim 5, which depends from Claim 1, and the rejection of Claim 15, which depends from Claim 11.

CONCLUSION

Claims 1-18 remain pending in the present application. Reconsideration and allowance of these claims is respectfully requested. If there are any questions, please telephone Edward Mao at (925) 895-3546 to expedite prosecution of this case.
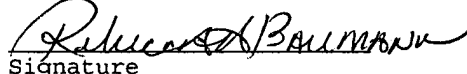
Respectfully submitted,

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6/26/03   *Rebecca Baumann*
Date   Signature